

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-26 (cancelled).

Claim 27 (currently amended): A ~~transgenic~~ genetically modified mouse comprising a knockout allele of the genomic α -TTP gene, wherein expression of α -TTP from the knockout allele is inhibited such that ~~transgenic~~ genetically modified mice homozygous for the knockout allele exhibit a vitamin E deficiency phenotype.

Claim 28 (currently amended): A ~~transgenic~~ genetically modified mouse homozygous for a knockout allele of the genomic α -TTP gene, wherein expression of α -TTP from the knockout allele is inhibited, and wherein the ~~transgenic~~ genetically modified mouse exhibits a vitamin E deficiency phenotype.

Claim 29 (currently amended): The ~~transgenic~~ genetically modified mouse according to claim 27, wherein the vitamin E deficiency phenotype comprises a failure of pregnant females to maintain pregnancy as assayed by the fetal resorption-gestation test.

Claim 30 (currently amended): The ~~transgenic~~ genetically modified mouse according to claim 28, wherein the vitamin E deficiency phenotype comprises a failure

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of pregnant females to maintain pregnancy as assayed by the fetal resorption-gestation test.

Claim 31 (currently amended): The ~~transgenic~~ genetically modified mouse according to claim 27, wherein the knockout allele comprises an inserted marker gene.

Claim 32 (currently amended): The ~~transgenic~~ genetically modified mouse according to claim 28, wherein the knockout allele comprises an inserted marker gene.

Claim 33 (currently amended): A method for producing the genetically modified mouse according to claim 27, comprising:

(a) inserting a mouse embryonic stem cell into an embryo taken from a pregnant female to form a chimeric embryo, wherein the embryonic stem cell comprises a knockout allele of the genomic α -TTP gene, and wherein expression of α -TTP from the knockout allele is inhibited such that transgenic mice homozygous for the knockout allele exhibit a vitamin E deficiency phenotype;

(b) transferring the chimeric embryo into the uterus of a pseudopregnant female; and

(c) allowing the embryo to undergo full fetal development to term to obtain the mouse according to claim 27.

Claim 34 (currently amended): A method for producing a ~~transgenic~~ genetically modified mouse homozygous for a knockout allele of the genomic α -TTP gene, wherein

expression of α -TTP from the knockout allele is inhibited, and wherein the transgenic mouse exhibits a vitamin E deficiency phenotype, wherein the method comprises:

- (a) crossing two mice obtained from the method of claim 33; and
- (b) screening the progeny obtained from the cross to identify a ~~non-human mammal~~ mouse homozygous for the knockout allele.

Claim 35 (new): A genetically modified mouse whose somatic and germline cells comprise a knockout allele of the genomic α -TTP gene, wherein expression of α -TTP from the knockout allele is inhibited such that genetically modified mice homozygous for the knockout allele exhibit a vitamin E deficiency phenotype.

Claim 36 (new): A genetically modified mouse whose somatic and germline cells are homozygous for a knockout allele of the genomic α -TTP gene, wherein expression of α -TTP from the knockout allele is inhibited, and wherein the genetically modified mouse exhibits a vitamin E deficiency phenotype.

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